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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,290	07/23/2003	Jeffrey Alan Miks	W0301007	7892

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EXAMINER	
CARPIO, IVAN HERNAN	

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/625,290	MIKS ET AL.	
	Examiner	Art Unit	
	Ivan H. Carpio	2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7-23-03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9-1-03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 6,13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Gochnour (US Patent 6865086).

With respect to claim 1 Gochnour teaches a multiuse circuit module (Fig. 17) comprising: a front half module (Fig. 15, element 510) wherein the front half module is a function circuit module having electrical contacts (Fig. 15, element 518) on a front portion there of for electrically coupling the multi use circuit module to a host device; and a rear half module (Fig. 17, element 540) removably coupled to the front half module for increasing functionality (column 3, lines 7-14) of the multi circuit module.

With respect to claim 2 and with all the limitations of claim 1, Gochnour teaches that the rear half is a non-functional component (note the rear half is an extension member therefore non-functional), the rear half module being coupled to the front half module to standardize a size (column 3, lines 7-14) of the multi use circuit module.

With respect to claim 3 and with all the limitations of claim 2, Gochnour teaches that the circuit module also comprises; a front half module connector (Fig. 17, element 520) formed on a rear section of the front half module, a rear half module connector (Fig. 17, element 546) formed on a front section of the rear half module for removably coupling the rear half module to the front half module.

With respect to claim 4 and with all the limitations of claim 3, Gochnour teaches a locking device (Fig. 15, element 522) coupled to the front half module connector and the rear half module connector (Fig. 17, element 548) for keeping the front half module coupled to the rear half module.

With respect to claim 5 and with all the limitations of claim 3, Gochnour teaches that the front half module connector is a channeling (Fig.17, element 520) formed on the rear section thereof, the channeling runs from a side wall of the front half module along a length of the front half module, and wherein the rear module connector is a tab member (Fig 17, element 546) formed on the front portion thereof.

With respect to claim 6 and with all the limitations of claim 4, Gochnour teaches that the locking member comprises; a channeling (Fig. 17, element 520) formed on a rear section of the front half module, the channeling running from a side wall of the front module along a length of the front half module; a front module locking tab member (Fig.

15, element 522) formed on a front portion extending downward in the channeling; a tab member (Fig. 17, element 546) formed on the front portion of the rear half module; and a rear module locking tab (Fig. 17, element 548) extending up from the tab member wherein the tab member of the rear half module is slid with in the channeling, the rear module locking tab engaging the front module locking tab (Fig. 17 when the rear half module is slid into the channeling the respective tabs lock the front and rear half modules together) to lock the from half module to the rear half module.

With respect to claim 13, Gochnour teaches a multiuse circuit module (Fig. 17) comprising: a front half module (Fig. 15, element 510) wherein the front half module is a function circuit module having electrical contacts (Fig. 15, element 518) on a front portion there of for electrically coupling the multi use circuit module to a host device; a rear half module (Fig. 17, element 540) removably coupled to the front half module for increasing functionality (column 3, lines 7-14) of the multi circuit module; and means formed on the front half module (Fig. 17, element 520) and the rear half module (Fig. 17, element 546) for removably coupling the front half module to the rear half module.

With respect to claim 14 and with all the limitations of claim 13, Gochnour teaches means formed on the front half module (Fig. 15, element 522) and rear half module (Fig. 17, element 548) for locking the front half module to the rear half module.

With respect to claim 15 Gochnour teaches a method for increasing functionality of a circuit module comprising; providing a front half module (Fig. 15, element 510) wherein the front half module is a function circuit module having electrical contacts (Fig. 15, element 518) on a front portion there of for electrically coupling the multi use circuit

module to a host device; forming connectors (Fig. 17, element 520) on the front half module; coupling a rear half module (Fig. 17, element 540) to the front half module for increasing functionality (column 3, lines 7-14) of the multi use circuit module wherein the rear half module has a connector (Fig. 17, element 546) for removably coupling the front half module to the rear half module.

With respect to claim 16 and with all the limitations of claim 15, Goshnour teaches the step of coupling a rear half module which is a nonfunctional (note the rear half is an extension member therefore non-functional) component, the rear half module being coupled to the front half module to standardize a size (column 3, lines 7-14) of the multi use circuit module.

Claims 1,8,9,15,17 and 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Ainsbury (US Patent 5513074).

With respect to claim 1 Ainsbury teaches a multi use module (Fig. 1A, 1B,2A, and 2B) comprising; a front half module (Fig.1A, element 1) wherein the front half module is a functional circuit module having electrical contacts (Fig.3, element 3) on a front portion there of for electrically coupling (column 4, lines 53-57) the multi use circuit module to a host device; and a rear half module (Fig. 1A, element 40) removably coupled (Fig. 1A) to the front half module for increasing functionality (column 2, lines 58-63) of the multi use circuit module.

With respect claim 8 and with all the limitations of claim 1, Ainsbury teaches that the rear half module is a function I/O component (column 2, lines 58-63), the rear half module being coupled to the front half module to increase functionality of the multi use circuit module by allowing different I/O components to be coupled to the front half module.

With respect to claim 9 and with all the limitations of claim 8, Ainsbury teaches that the front half module connectors (Fig. 4B, element 42) and the rear half module connectors (Fig. 7, element 49) comprises: front half module electrical contacts formed on a rear portion of the front half module for allowing electrical coupling between the front half module and the rear half module.

With respect to claim 15 Ainsbury teaches a method for increasing functionality of a circuit module comprising; providing a front half module (Fig. 1A, element 1) wherein the front half module is a function circuit module having electrical contacts (Fig. 3, element 3) on a front portion there of for electrically coupling the multi use circuit module to a host device; forming connectors (Fig. 4B, element 42) on the front half module; coupling a rear half module (Fig. 1A, element 40) to the front half module for increasing functionality (Column 2, lines 58-63)of the multi use circuit module wherein the rear half module has a connector (Fig. 7, element 49) for removably coupling the front half module to the rear half module.

With respect to claim 17 and with all the limitations of claim 15, Ainsbury teaches coupling a rear half module which is a function I/O component (column 2, lines 58-63), the rear half module being coupled to the front half module to increase functionality of

the multi use circuit module by allowing different I/O components to be coupled to the front half module.

With respect to claim 18 and with all the limitations of claim 17, Ainsbury teaches forming electrical contacts (Fig. 4B, element 42) on a rear portion of the front half module to electrically couple the front half module to the rear half module and forming electrical contacts (Fig. 7, element 49) on a front portion of the rear half module to electrically couple the front half module to the rear half module.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gochnour (US Patent 6865086).

With respect to claim 7 and with all the limitations of claim 4, Gochnour teaches that the locking member comprises a channeling (Fig.17, element 520) formed on a rear section of the front half module, the channeling running from a side wall of the front half module along a length of the front half module; a tab member (Fig. 17, element 546) formed on the front portion of the rear half module, and an indentation (Fig. 17 the indentation between element 548 and the body 544) formed on the tab member all of

which interact so as to contribute to locking the front half module to the back half module. In the embodiment relating to figures 15,16 and 17 Gochnour does not teach a front module locking ball extending downward in the channeling and engaging with and indentation, of roughly the same size and shape, of the rear half module and locking the front half to he rear half module. In the embodiment relating to figure 4a Gochnour does teach a locking ball (Fig. 4a, element 148) engaging with an indentation (Fig. 4a, element 129) of roughly the same size and shape locking the front and rear half modules together. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the square shaped member (Fig. 15, element 522) with the locking ball taught in Fig. 4a along with the indentation of the rear half module to lock the front half module to the rear half module because doing so reduce the number of sharp edges which can chip with pressure as well as the round edges enables reliable removable interconnection between the front half module and rear half module (column 7, lines 54-65).

Claims 10,11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ainsbury (US Patent 5513074).

With respect to claim 10 Ainsbury teaches all of the limitations of claim 9 but does not teach specifically that the connector is an edge connector. Edge connectors are well known in the art for electrically coupling electrical assemblies further more it would have been obvious to one of ordinary skill in the art to use and edge connector

because edge connectors are so well know that manufacturing methods would be easily obtained.

With respect to claim 11 and 12 and with all the limitations of claim 8, Ainsbury teaches a channeling (Fig. 2B, element 48 and Fig. 2A, in between elements 47) formed on the rear section of the front half module and the front section of the rear half module respectively, the channeling running along a length of the front and back half; a connector contact (Fig. 2B, element 42 and Fig. 2A element 49) running along a length of the channeling for allowing electrical coupling between the front half module and the rear half module, a tab member (Fig. 7, the rectangular tab at the front portion of element 41 and Fig. 4B, the rectangular tab at the back portion of element 42) formed on a front portion of the rear half module and the back portion of the front half module respectively and a mating connector (Fig. 7, element 49 and Fig.4B, element 42) on the tab member, wherein the tab member of the rear half module and the front half module is positioned within the channeling, the mating connector engaging the connector contact electrically couple the front half module to the rear half module. Ainsbury does not specifically teach that the connectors on the front and rear half modules are edge connectors and pin connectors. It is well known in the art to use edge connectors and pin connectors to electrically couple two elements further more it would have been obvious to one of ordinary skill in the art at the time of the invention to use and edge connector and a mating pin connector to electrically couple the two halves because these types of connectors are so well known that manufacturing methods would be easily obtained.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 4942550 discloses an electrical device with edge and pin connector, US Patent 6877995 discloses a memory card with pin connector, and US Patent 6097605 discloses a memory module.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ivan H. Carpio whose telephone number is 571-272-8396. The examiner can normally be reached on M-R 6:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IC

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